RHUMB LINE – A line on the surface of the earth making the same angle with all meridians; a loxodrome or loxodromic curve spiraling toward the poles in a constant true direction. Parallels and meridians, which also maintain constant true directions, may be considered special cases of the rhumb line.

RIGHT ANGLE PRISM – A hand tool which defines a 90^{o} line of sight by means of a pentaprism. Double pentaprisms provide accurate line of sight to left as well as right.

RIGID GRAVER – A tool having two feet and a needle point for scribing.

RIVER – A water course with a substantial stream of fresh water generally retaining some flow during dry weather in its natural state.

RIVER CROSSING – The process of carrying a line of leveling across a wide stream when no suitable bridge is available. Special observations are required from both sides of the stream.

ROAD – A rural route for vehicles usually traversable by passenger cars and by trucks. See JEEP TRAIL and HIGHWAY.

ROD LEVEL – a spirit level attached to a leveling rod to indicate when the rod is vertical.

ROELOFS PRISM – An optical device attached to the objective end of a theodolite to provide a means of pointing precisely on the center of the sun. Four overlapping images define a small square which are used as a point target.

ROLL – 1) Rotation of an aircraft about its longitudinal axis. 2) Rotation of camera or coordinate system about the X axis – (omega – ω).

ROLLING GROUND or LAND – Any undulating land surface; a succession of low hills giving a wave effect to the surface. A land surface much varied by many small hills and valleys.

ROOT MEAN SQUARE ERROR – The square root of the sum of the squares of individual errors (deviations from the mean) divided by the number of errors. See STANDARD ERROR.

ROUNDOFF – The addition or subtraction of a small amount (one-half or less in terms of the last retained significant figure) to reduce the number of significant digits in a computed or measured quantity.

ROUTE SURVEY – Survey for construction of linear work such as highways, canals, pipeline, powerlines etc.

S

SETER – Survey Equipment Technical Evaluation Report.

SIA – Stereo Image Alternator.

SLAR – Side Looking Airborne Radar.

SLR – Side Looking Radar.

SADDLE – A low point on a ridge or crest line, generally a divide between the heads of streams flowing in opposite directions.

SAFELIGHT – A light of such intensity and color range that it will not actinically affect the specific light-sensitive materials being handled and developed in a darkroom.

SAG CORRECTION – The difference between the effective length of a tape (or part of a tape) when supported continuously throughout its length and when supported only at the ends or at a limited number of independent points.

SALES INDEX MAP (USGS) – State maps for public distribution showing, by diagram or by listing, maps offered for sale by the Geological Survey. Quadrangle outlines, names, dates of survey, and authorship are shown by overprint. River surveys, are indicated by overprinting the river courses; lists of special maps available and items of general information are printed on the back.

SALT MARSH – See SALT MARSH*.

SAND DUNE – A mound, ridge, or hill of loose sand, heaped up by the wind.

SAND SPIT – A narrow sand embankment, created by an excess of deposition at its seaward terminus, with the end away from the point of origin terminating in open water.

SATELLITE GEODESY – The surveying discipline which uses earth orbiting man-made satellites to obtain geodetic data.

SATURATION – Point at which additional input energy to the sensor results in no increase in sensor output.

SCALE CONVERSION – The changing of map materials from one scale to another, usually by photographic methods and usually without changing the graphic content.

SCALE FACTOR – In the State coordinate systems scale factors are applied to geodetic lengths to obtain grid lengths.

SCALING – The adjustment of a stereomodel to a scale of known ratio to the ground distances.

SCANNING DENSITOMETER – Device used to convert image data from film or photographic format to electronic video signal format. Usually the film is placed on a glass cylinder which rotates and slowly translates. A fine beam

of light is focused on the film, passed through the film and is detected by a photomultiplier where it is amplified to a usable video signal.

SCATTERING – Diffuse reflection of electromagnetic energy due to moisture and dust particles in the air.

SCHEIMPFLUG CONDITION – One of the two conditions of direct optical projection that must be satisfied to achieve maximum sharpness in a projected image. It requires that the object plane, the principal plane of the lens, and the image plane all intersect in a common line.

SCRIBED DRAWING – A scribing guide on which the negative scribing has been completed. See COLOR-SEPARATION DRAWING.

SCRIBING – The art of technique of cutting with specially designed tools through a photographically opaque coating applied to a transparent base, usually plastic. Portions of the coating are removed, creating a negative image on the lines, letters, and symbols desired for reproduction.

SCRIBING COPY – See COLOR-SEPARATION GUIDE.

SEA LEVEL DATUM – A determination of mean sea level that has been adopted as a standard datum for heights or elevations. The Sea Level Datum of 1929, the current standard datum for geodetic leveling in the United States, is based on tidal stations along the coasts.

SEA LEVEL FACTOR – The factor applied to ground measurements to reduce measurements to sea level datum.

SECANT CONE – A cone which cuts another surface in two places.

SECONDARY STATION – A survey station established in conjunction with the main scheme, but observed with a lower order of accuracy and precision, to increase the density of control.

SECOND ORDER – Designation of survey work of next to the highest category of precision and accuracy. See CONTROL SURVEY CLASSIFICATION.

SECOND ORDER LEVELING – Differential leveling which closes on First Order Bench Marks using specified equipment and methods which achieve closures of 0.035 ft./mile or less.

SECOND ORDER MAGNITUDE RELIEF FEATURE – Mountains, plains and basins of constructional nature.

SECOND ORDER TRAVERSE – A closed survey which has a closing error of 1 in 10,000 or less which also complies with specifications for angle, distance and azimuth observations.

SECOR – Acronym for Sequential Collation of Range. An electronic distance measurement system for satellite observation.

SECTION (U.S.C. & G.S.) – That portion of a line of levels which is recorded and abstracted as a unit. See SECTION*.

SELF LEVELING LEVEL – See AUTOMATIC LEVEL.

SELF READING ROD – A level rod which has a movable tape which can be set to read elevation values from a given HI.

SEMIANALYTICAL AEROTRIANGULATION – A category of aerotriangulation methods in which the positions and/or elevations of ground stations are obtained by the mathematical adjustment of model, section, or strip coordinates derived from models oriented in a stereoplotting instrument. See BZ CURVE.

SEMI-MATTE PRINT – A non-glossy paper with only a faintly lustrous surface.

SEMITANGENT – The line segment between the Point of Curvature and the Point of Intersection on a curved route survey.

SENSOR – Detecting device which collects and conveys some interpretable data; the component of an instrument that converts an input signal into a quantity which is measured by another part of the instrument.

SENSOR PLATFORM – Vehicle on which a remote sensor is mounted and carried aloft; an aircraft platform, space platform, etc.

SERIES CONVERSION (USGS) – The preparation of a 15-minute map from source materials originally used to publish 7½ -minute maps, with approximate cartographic changes.

SET-UP – 1) The transit or leveling instrument's location for observation. 2) A correction in precise taping.

SHADED-RELIEF MAP – A map on which the hypsography is made to appear three dimensional by the use of graded shadow effects. A shaded-relief map may also contain contours or hachures in combination with the shading.

SHOAL – A submarine elevation over which water is shallow, which is detached from the shore and composed of any material other than rock or coral and which is a menace in navigation. See REEF.

SHORE – The land which is covered and uncovered by the rise and fall of the normal tide.
It is the strip of land between the mean high-water and mean low-water lines. In its strictest use, the term applies only to land along tidal waters.

SHORELINE, OCEAN – The line along which the land surface meets the water surface of a lake, sea, or ocean. Strictly speaking, it is not a line, but a narrow strip or area, embracing that part of the land surface which comes in contact with wave action both above and below the surface of the water. The term does not apply on tidal flats or

marshes which are overflowed by the tides, but essentially to strips where the land surface has an appreciable slope toward the water. See COASTLINE.

SHORELINE, RIVER – The shoreline is the line which is washed by the water wherever it covers the bed of the river within its banks. It lies along the bank at the means level attained by the waters of the river when they reach and wash the bank without overflowing it.

SHUTTER – A mechanism for controlling the interval of time during which light is allowed to pass through an optical or photographic system.

SIDE CANYON – A small ravine draining into a main river.

SIDELAP – The area common to two adjacent strips of aerial photography.

SIDE-LOOKING RADAR (SLAR) – A radar system using a stabilized antenna oriented at right angles to the aircraft's flight path, using for radar mapping at night or through cloud cover.

SIDE SHOT – Observations taken from a survey station to a point not on the continuous line of survey. A point whose position or elevation was so determined.

SIDE SIGHT – A sight to a point not on the line of traverse. It may be a side shot or an observation to locate an in-and-out station, an azimuth mark, or an intersected point.

SIGNAL – A natural or artificial object or structure located at or near a survey station and used as a sighting point or target for survey measurements.

SIGNAL-TO-NOISE RATIO – Ratio of the value of the signal to that of the noise.

SIGNATURE – Unique reflectance or emission response from a particular object or environmental association.

SIMULTANEOUS LEVEL LINE – See DOUBLE RODDED LINE.

SKETCHMASTER – A trade name for a mounted semisilvered mirror used for tranformation of aerial photographs in updating maps.

SKEW MERCATOR – See OBLIQUE MERCATOR.

SLANT RANGE – A line of sight distance between two points of different elevation.

SLOTTED TEMPLET – A card with precision slots cut along radial lines determined from pass points; used in radial triangulation.

SLOUGH – A swampy ditch. See BAYOU.

SLOTTED TEMPLET TRIANGULATION – Radial phototriangulation using slotted templets. Also called a laydown.

SMALL SCALE MAP – A map covering a very large area as a 1:1,000,000 base map. See LARGE SCALE MAP.

SNAP MARKER – A point transfer device designed to be used with a mirror stereoscope. A steel ball is struck by a spring-loaded hammer to make a small indentation about 100 microns in diameter in the emulsion.

SONAR – 1) A sonic device used in hydrography for the detection and location of underwater objects. 2) A system for determining depths by measuring the interval of time between transmission of an underwater sonic or ultrasonic signal and return of its echo.

SONNE CAMERA – A system for taking continuous strip photography by moving the film across a slit at a speed corresponding to the ground speed.

SOUND – 1) A relatively long arm of the sea or ocean forming a channel between an island and a mainland or connecting two larger bodies, as, a sea and the ocean, or two parts of the same body; usually wider and more extensive than a strait. 2) To measure or ascertain the depth of water, as with sounding lines.

SOUNDING – Measuring the depth of water with a lead line or by other means.

SOURCE MATERIAL – Data of any type required for production of maps and charts.

SPACE COORDINATES – See RECTANGULAR SPACE COORDINATES.

SPADING – Removing scribe coating with a wide flat blade.

SPATIAL MODEL – The three-dimensional image seen by stereoscopic methods.

SPECIAL PRINTING PLANIMETRIC MAP (USGS) – Standard 7 1/2 – and 15-minute series and 1:250,000-series topographic maps on which the contours and woodland data are omitted.

SPECIAL PURPOSE MAP (USGS) – A map designed to meet limited objectives emphasizing or representing certain classes or types of information. Typical examples are the geologic map of the United States; the shaded-relief map of Massachusetts, Rhode Island, and Connecticut, and a State index map.

SPECTRAL CHARACTERISTIC – Relation, usually shown graphically, between wavelength and some other variables.

SPHERICAL COORDINATES – Pairs of angular values such as latitude and longitude or right ascension and declination which locate points on a sphere in reference to fixed, or defined, great circles.

SPHERICAL EXCESS – The amount by which the sum of three error free angles of a triangle on a sphere exceeds 180 degrees.

SPHERICAL TRIANGLE – A triangle, on the surface of a sphere, whose sides are arcs of three great circles.

SPHEROID – Any figure differing slightly from a sphere. In geodesy, it is a mathematically defined figure closely approximating the geoid in form especially used in connection with gravity observation. See ELLIPSOID.

SPHEROIDAL EXCESS – The amount by which the sum of three error-free angles of a triangle on a spheroid exceed 180 degrees. See SPHERICAL EXCESS.

SPIRIT LEVELING – The determination of elevations by use of a leveling rod and an instrument incorporating a spirit level to establish a horizontal line of sight; the term has now been broadened to include leveling by means of other types of precise levels, such as an automatic level.

SPIT – A narrow, low-lying tongue of sand or gravel, or small point, projecting into the sea. It differs from a bar in that it is attached to the land at one end, and it is often formed by shore currents across the entrance to a bay.

SPLINES – Flexible curve rulers which are adjusted to the points of a curve to be drawn and held in place by lead weights.

SPOT ELEVATION (USGS) – An elevation shown on a topographic map to supplement the information shown by contour lines and bench marks. Where the exact location of the elevation is not evident, it is indicated by a brown cross.

SPUR – A submarine prolongation of a mountain range onto or across a continental or insular shelf.

SPUR LINE – A survey line connected at only one end to similar surveys of equal or higher order.

STABLE BASE – A film used in cartography having a high dimensional stability over a period of many years.

STADIA – A technique of distance measurement wherein the observer reads the intercept subtended on a graduated rod between two hairs or marks on the reticle of the telescope, the distance to the rod being proportional to the rod intercept. A rod specially designed for this use is called a stadia rod; the marks on the reticle are called stadia wires; such a survey is called a stadia survey, etc.

STANDARD – An exact value (a physical entity or abstract concept) established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities, establishing practices or procedures for evaluating results. See STANDARD*.

STANDARD-ACCURACY MAP – A map which complies with the National Map Accuracy Standards.

STANDARD-CONTENT MAP (USGS) – A map that represents natural and manmade features according to current standards. Topographic instructions specify classes and dimensions of various map features shown so that uniform treatment is attained throughout a map series. Maps conforming to these specifications are considered to have standard content.

STANDARD ERROR – Also standard deviation. The root-mean-square value based on the differences between the average error and the individual errors of a set. It is a measure of the precision of a single observation.

STANDARD MAP – See STANDARD QUADRANGLE MAP.

STANDARD MERIDIAN – A meridian on a map projection along which scale is as stated.

STANDARD PARALLEL – A parallel of latitude which is used as a control line in the computation of a map projection. See STANDARD PARALLEL*.

STANDARD QUADRANGLE (USGS) – A quadrangle of a specific series, conforming to the systematic pattern of the series.

STANDARD QUADRANGLE MAP (USGS) – A designation for one of a series of quadrangle maps conforming in content and format to the standards in effect at the time the map was produced. See MAP OF STANDARD FORMAT, STANDARD ACCURACY MAP and STANDARD CONTENT MAP.

STANDARD REVISION (USGS) – The updating and correction of a map to reflect changes that have occurred since the original survey or latest revision. The accuracy of the existing map is preserved, and current specifications pertaining to map symbolization, content, and format are generally applied. See MAP REVISION.

STANDARD TENSION – The pull on a survey tape at which the tape was standardized.

STATE BASE MAP – A base map of a state as a unit.

STATE COORDINATE SYSTEMS – The plane-rectangular coordinate systems established by the United States Coast and Geodetic Survey, one or more for each state in the United States, used for defining positions in terms of plane-rectangular (x and y) coordinates. Also called State Plane Coordinate Systems.

STATE PLANE COORDINATE SYSTEMS – The plane-rectangular coordinate systems established by the U.S. Coast and Geodetic Survey, one for each State in the Union, used for defining positions of geodetic stations in terms of plane-rectangular (x and y) coordinates.

The two principal systems in use in the United States are the Lambert Conformal Conic Map Projection and the Transverse Mercator Map Projection. See OBLIQUE MERCATOR PROJECTION.

STATION – 1) A point whose position has been or will be determined by surveying methods. 2) Any survey point whose position is given by its accumulated distance from a starting point. 3) A 100 foot distance between points on route surveys; a unit of measure.

STATOSCOPE – An altimeter.

STEREO BASE – A line representing the distance and direction between complementary image points on a stereo-pair of photos correctly oriented and adjusted for comfortable stereoscopic vision.

STEREOCOMPARATOR – A stereoscopic instrument for measuring photograph coordinates of image points.

STEREOCOMPILATION – 1) The procedure of producing a map from aerial photographs by means of stereoplotting instruments. 2) The map data produced with stereoplotting instruments.

STEREOGRAM – A stereoscopic pair of photographs or drawings correctly oriented and mounted or projected for stereoscopic viewing.

STEREOGRAPHIC PROJECTION – A map plotting system in which points on the ellipsoid are projected onto a plane parallel to a tangent plane from a point on the opposite side of the sphere from the point of tangency. The polar case is most useful. See POLAR STEREOGRAPHIC.

STEREOIMAGE ALTERNATOR – A device for viewing stereoscopic models in direct-viewing double-projection plotting instruments, consisting of synchronized, rapidly rotating shutters placed in both the projection field and the viewing field. The shutters in the projection field cause the imagery of the left and right diapositives to be projected on the tracing table in rapid alternation. The shutters in the viewing field, rotating in phase with those in the projection field, permit each eye to see only the imagery of the corresponding (left or right) diapositive for attainment of the stereoscopic effect.

STEREOMETER – A measuring device comprising a micrometer movement by which the separation of two index marks can be changed in order to measure parallax difference on a stereoscopic pair of photographs. Also termed parallax bar.

STEREO PAIR – Two aerial photographs taken from separate positions of the same area with sufficient overlap to permit stereoscopic viewing.

STEREOPLANIGRAPH –Brand name of a universal stereoplotting instrument.

STEREOPLOTTERS – A stereoscopic plotting instrument of several types: Stereometers, Paper Print Plotters, Direct Viewing Projection Plotter, Mechanical Projection Plotters, Optical Double Projection Plotters.

STEREOSCOPE – An optical instrument used for viewing two properly related photographs or diagrams simultaneously to obtain the mental impression of a three-dimensional model. See ZOOM STEREOSCOPE.

STEREOSCOPIC PLOTTING INSTRUMENT – An instrument for compiling a map or obtaining spatial solutions by observation of stereoscopic models formed by stereoscopic pairs of photographs.

STEREOSCOPIC PRINCIPLE – The formation of a single, three-dimensional image by binocular vision of two photographic images of the same terrain taken from different exposure stations.

STEREOSCOPY – The science and art that deals with the use of binocular vision for observation of a pair of overlapping photographs or other perspective views, and with the methods by which such viewing is produced.

STEREOTEMPLET – A slotted templet derived from a stereoscopic model and made in two parts, each covering the same area. The composite templet is adjustable in scale and is representative of the horizontal plot of the model.

STEREOTEMPLET TRIANGULATION – A mechanical analog system of horizontal aerotriangulation that features the adjustment of pass points to horizontal control by means of stereotemplets.

STEREOTRIANGULATION – A triangulation procedure that uses a stereoscopic plotting instrument to obtain the successive orientations of the stereoscopic pairs of photographs into a continuous strip. The spatial solution for the extension of horizontal and (or) vertical control using these strip (or flight) coordinates may be either graphical or computational procedures often called bridging.

STICKUP – Adhesive-backed film or paper on which letters or symbols have been photographed or printed. Also, the operation of applying such lettering and symbols to color-separation guides. See PHOTOTYPE.

STREET – a public thoroughfare (generally urban) over 20 feet in dedicated width.

STRENGTH OF FIGURE – A number expressing the relative strength of a triangle as a function of its shape; a smaller number indicates greater relative strength. The strength of figure is independent of the size of the triangle or of the precision of angle measurements.

STRIP – A series of consecutive overlapping serial photographs or stereomodels in a flight line that may be treated as a unit in aerotriangulation.

STRIP ADJUSTMENT – The adjustment of consecutive photographs, models, or groups of these into a homogeneous strip. The adjustment may be horizontal or vertical or both; it is often an intermediate step in analytical of semianalytical aerotriangulation. See BLOCK ADJUSTMENT.

STRIP CAMERA – See SONNE CAMERA.

STRIP WIDTH – The average dimension, measured normal to the flight line, of a series of neat models in the flight strip. Strip width is generally considered as equal to width between flights.

SUBDIVISION SURVEY – A land survey, usually filed in County records, dividing land into three or more separate lots and providing access thereto. See URBAN SUBDIVISION* and SUBDIVISION OF SECTION SURVEY*.

SUBLITTORAL – Refers to the benthonic zone extending from low tide level to the edge of the continental shelf or some comparable depth of water. It may be separated into inner and outer zones at some depth ranging from about 50 to about 300 feet.

SUBMARINE BULGE – Fanlike sedimentary deposit, presumed to have been formed by turbidity currents, on the outer continental slope at the mouth of a submarine canyon. Term is applicable where data are inadequate to distinguish between deltas and alluvial fans.

SUBMARINE CANYON – Steep valleylike submarine depression crossing the continental margin region, except for isolated portions of outer ridges, less than 1 to more than 10 miles wide, less than 60 to more than 6000 feet deep.

SUBMERGED LANDS ACT*.

SUBSTITUTE CENTER – A photo image used instead of the principal point because it is easily identified.

SUBTENSE BAR – A horizontal held bar of precisely determined length, used to measure distances by observing the angle it subtends at the distance to be measured.

SUPER WIDE ANGLE LENS – A lens having an angle of coverage greater than 100º.

SUPPLEMENTAL CONTOUR – See preferred term SUPPLEMENTARY CONTOUR.

SUPPLEMENTAL CONTROL – Vertical (and sometimes horizontal) control of selected photo-identifiable points to be used in photogrammetric compilation.

SUPPLEMENTAL STATION (USGS) – A secondary triangulation station generally established to obtain an elevation by vertical angles for photogrammatic mapping.

SUPPLEMENTAL BENCH MARK – See BENCH MARK, NONMONUMENTED.

SUPPLEMENTAL CONTOUR – A contour line drawn between basic-interval contour lines on a map of an area that has wide variation in slope. Supplemental contours are only used where it is necessary to portray local features not adequately shown by basic contours.

SUPPLEMENTARY CONTROL – See preferred SUPPLEMENTAL CONTROL.

SURFACE MANAGEMENT MAPS – Part of the Mineral Management Series which combines surface ownership (Land Status) and planimetric or Topographic data.

SURFACE-MINERAL MANAGEMENT MAPS – Part of the Mineral Management Series which combines sub-surface ownership (Land Status) and planimetric or Topographic data.

SURGE ZONE – The region between the breaker zone and the 50-60 feet depth contour, where the effect of sea waves and swell produces oscillatory surges causing sediment transport and abrasive erosion.

SURVEILLANCE PHOTOGRAPHY – Aerial photography for the purpose of detection of trespass or other infraction of laws.

SURVEY (USGS) - 1) the orderly process of determining data relating to the physical or chemical characteristics of the earth. The list of orderly processes which can be properly termed *"surveys"* is long and may be divided into classes according to the type of data obtained, the methods and instruments used, and the purposes to be served. Examples: geodetic survey, topographic survey, hydrographic survey, land survey, geologic survey, geophysical survey, soil survey, mine survey, engineering survey. 2) The associated data obtained in a survey. The data obtained in a particular project may be designated by the name of the project, as "*the topographic survey of the District of Columbia."* 3) An organization engaged in making a survey. Such an organization is often given an official name which includes the word *"survey."* Examples: *"The United States Geological Survey," "The Massachusetts Geodetic Survey."* See MINERAL SURVEY*, PRELIMINARY SURVEY, RECONNAISANCE SURVEY, SUBDIVISION SURVEY, TOWNSITE SURVEY* and TRANSIT-STADIA SURVEY.

SURVEYING – The science or art of making the measurements necessary to determine the relative position of points above, on, or beneath the surface of the earth, or to establish such points. See PLANE SURVEYING.

SWALE – A slight, marshy depression in generally level land.

SWAMP – Low lying land saturated with moisture and overgrown with vegetation but not covered with water. See SWAMP*.

SWING – 1) the correction applied to an observation made to an eccentric signal. 2) The rotation of a photograph in its own plane around the photograph perpendicular.

SWING OFFSET – The perpendicular distance from a point to a transit line found by moving the tape in an arc until a minimum horizontal distance is obtained.

SWIVEL GRAVER – A tool for scribing curved lines.

SYMBOL – A diagram, design, letter, or abbreviation placed on maps and charts, which by convention, usage, or reference to a legend is understood to stand for or represent a specific characteristic or object.
SYSTEMATIC ERROR – An error that occurs according to a known pattern or law. Systematic errors can be compensated for partially by corrections and appropriate measuring techniques.

T

T.B.M. (USGS and USC & GS) – Temporary bench mark. See TURNING BENCH MARK.
TIR – Thermal infrared.
TP – Turning point.
TABLELAND – Land elevated much above the level of the sea and generally offering no considerable irregularities of surface. 2) A flat or undulating elevated area; a plateau or mesa.
TABLEMOUNT – A seamount (roughly circular or elliptical in plan) generally deeper than 100 fathoms, the top of which has a comparatively smooth platform. Syn: SEAMOUNT: GUYOT.
TACHYMETRY, TACHEOMETRY – Surveying method used to denote the procedures for obtaining horizontal distances and differences in elevation by indirect methods, which are based on the optical geometry of the instruments employed. Sometimes referred to an optical distance measurement, telemetry, or stadia.
TALUS – A collection of fallen disintegrated material which has formed a slope at the foot of a cliff.
TANGENT – 1) That part of a traverse or alinement included between the point of tangency of one curve and the point of curvature of the next curve. 2) Sometimes applied to a long straight line of a traverse, especially on a route survey, whether or not the termini of the line are points of curve. See TANGENT* and SEMITANGENT.
TANGENTIAL DISTORTION – See LENS DISTORTION.
TANGENT PLANE – A plane that touches a curved surface of double curvature at one and only one point or that touches a curved surface of single curvature along one or more parallel straight lines which are elements of the surface, without intersecting the surface.
TANGENT SCREW – A knob mounted on a fine threaded screw giving a tangential movement for making the final setting to an instrument of precision, as a surveyor's transit.
TAPE – A steel, fabric or Invar ribbon used for direct distance measurement.
TAPE CORRECTION – A quantity or quantities applied to a taped distance to eliminate or reduce errors due to the physical condition of the tape and to the way in which it is used.
TARGET – A symmetrical pattern centered over a point to be recorded on a photograph. See PANEL.
TARGET IDENTIFICATION OR RECOGNITION – Process by which targets from image format data are identified by means of a decision rule.
TARGETING – The distinctive marking of a ground point with material of any kind, placed in a symmetrical contrasting pattern about the point to facilitate the identification and precise recovery of that point on an aerial photograph. Also called paneling.
TELESCOPE LEVEL – A sensitive spirit level attached to a transit's telescope, with its axis parallel to the telescope axis.
T-ELEVATION – A photogrammetrically determined elevation, shown on map manuscripts. The elevation figure is followed by the letter *"T,"* as 1057T, to indicate that the elevation is unchecked. See SPOT ELEVATION.
TELLUROMETER – A trade name of an electronic measuring system.
TEMPERATURE CORRECTION – An amount added algebraically to a measurement to account for length changes due to thermal variance from standard conditions.
TEMPLET – 1) A representation of a photograph or a stereomodel for use in aerotriangulation. 2) The design-cross-section of a road, canal, etc. See SLOTTED TEMPLET TRIANGULATION.
TEMPLET LAYDOWN – See RADIAL TRIANGULATION.
TEMPLET MATCHING – An operation used to find out how well two photographs or images match one another.
TEMPORARY BENCH MARK – See BENCH MARK, NONMONUMENTED.
TERRACE – 1) A flat, level or nearly level, narrow area of land bordering a river or lake, bounded on at least one side by a definite steep slope rising upward from it, and on the other sides by downward slopes. 2) A low embankment of ridge of earth constructed across a slope to control surface runoff and minimize soil erosion. 3) Sloping ground cut into a succession of benches and steep inclines for purposes of cultivation.
TERRAIN – An area of ground considered as to its extent and topography.
TERRAIN FACTORS – Terrain factors consist of land forms, drainage features, the ground, the vegetation, and the cultural features or manmade changes in the surface of the earth.